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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,267	03/05/2002	Hanan Luss	APP 1451 US	6425

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EXAMINER	
DYKE, KERRI M	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,267	LUSS ET AL.	
	Examiner	Art Unit	
	Kerri M. Dyke	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☒ Claim(s) *10-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/05/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it appears to exceed the 150-word limit. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The means of claims 1-4 are not properly supported by the specification. The specification must clearly define the means. The means cannot be unlimited, as they are currently claimed to be on page 29 of the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The means of claims 1-4 are not clearly identified in the specification. Therefore claims 1-4 are indefinite because the metes and bounds cannot be determined.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-2, 4-6, and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Bawa et al. (US 6,697,333).

8. In regards to claims 1 and 5, Bawa et al. discloses a method comprising the steps of: (a) analyzing a representation of a set of out-of-kilter communications paths and a representation of a set of in-kilter communications paths to generate an analysis; (b) generating a set of permitted changes, based upon the analysis, to both the representation of the set of out-of-kilter communications paths and the representation of the set of in-kilter communications paths; and (c) generating, in response to the set of permitted changes, an ordered sequence of recommended reassignments of communications paths and associating at least one out-of-kilter communications path associated with the ordered sequence of recommended reassignments with

a new in-kilter communications path. Column 2 lines 21-38 disclose analyzing a set of routes. In response to finding that some routes are not optimal because the cost is high or there are too many links, a set of alternate paths are developed. The alternate paths are ranked based upon a set of criteria. The best path is chosen and the communication path is rerouted onto the better path. It is inherent that there is a device with means for carrying out the method.

9. In regards to claims 2 and 6, Bawa et al. discloses the inventions of claims 1 and 5 wherein each communication path in the ordered sequence of recommended reassignments is reassigned onto a route that is in-kilter (column 2 lines 21-38).

10. In regards to claims 4 and 8, Bawa et al. discloses the inventions of claims 1 and 5 wherein the step of generating the ordered sequence of recommended reassignments of communications paths is also responsive to a set of capacity constraints (column 2 lines 1-4).

11. In regards to claim 9, Bawa et al. discloses the method of claim 5 wherein each communications path in the ordered sequence of recommended reassignments is reassigned from its existing route to a single new route with the same load. Column 2 lines 1-4 indicate that the method of Bawa et al. is designed to both find the optimum path and balance load. Load balancing is the shifting of load from one node/route to another. Load is not dropped; therefore Bawa et al. teach shifting the communication path to new route with the same load.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al. (US 6,697,333) in view of Yamamoto et al. (US 4,991,204).

14. In regards to claim 3, Bawa et al. discloses the device of claim 1, but not further comprising means for transmitting the ordered sequence of recommended reassignments.

Yamamoto et al. discloses transmitting the recommended reassignments in column 4 lines 8-11.

It would have been obvious to one of ordinary skill in the art to transmit the reassignments, as taught by Yamamoto et al. in the reassignment device of Bawa et al. because doing so helps to ensure that all nodes receive and initiate route optimization, as taught by Yamamoto et al. in column 4 lines 11-14.

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al. (US 6,697,333) in view of Amerga et al. (6,711,420).

16. In regards to claim 7, Bawa et al. discloses the method of claim 5, but not wherein the number of reassignments in the ordered sequence of recommended reassignments is less than a predetermined number.

Amerga et al. disclose limiting the number of reassignments in column 5 lines 50-54.

It would have been obvious to one of ordinary skill in the art to limit the number of reassignments, as taught by Amerga et al. in the reassignment method of Bawa et al. because making many reassignments may be ineffective, as taught by Amerga et al. in column 5 lines 50-54.

Allowable Subject Matter

17. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Zhu et al. (*Approach to Automatic Contingency Selection by Reactive Type Performance Index*) discloses an apparatus and method of network optimization using an out-of-kilter algorithm. It is disclosed as a method for managing a network of power lines, but is applicable to communication paths, especially because power lines are inherently capable of transmitting data, as evidenced by the broadband-over-power lines initiatives.

b. Singh (*Improved Methods for Storing and Updating Information in the Out-of-Kilter Algorithm*) discloses an improved out-of-kilter algorithm for optimizing networks.

c. The cited US Patents and Patent Publications disclose various methods and apparatus for communication path optimization.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd

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6/10/05